

## CLAIMS

What is claimed is:

1. A method for integrating encryption functionality into a database system, the method comprising:
  - (a) providing at least two functions to support data encryption in a database system; and
  - (b) utilizing the at least two functions within structured query language statements.
2. The method of claim 1 wherein step (a) further comprises (a1) adding the at least two functions as user-defined functions in the database system.
3. The method of claim 2 wherein the user-defined functions further comprise a first function to encrypt the user-specified data when inserted or updated in the database system.
4. The method of claim 3 wherein the user-defined functions further comprise a second function to decrypt the user-specified data when selected from the database system.
5. The method of claim 3 wherein the first function further encrypts the user-specified data with a user-specified password.
6. The method of claim 5 wherein the first function further encrypts with a password hint.

1 7. The method of claim 6 wherein the user-defined functions further comprise a third  
2 function to get the password hint.

1 8. A system for integrating encryption functionality into a database system, the system  
2 comprising:  
3 at least one computer processing device; and  
4 a database management system installed on the at least one computer processing device, the  
5 database management system supporting utilization of at least two functions for data  
6 encryption via structured query language.

7 9. The system of claim 8 wherein the at least two functions further comprise user-defined  
8 functions in the database management system.

9 10. The system of claim 9 wherein the user-defined functions further comprise a first  
10 function to encrypt the user-specified data when inserted or updated in the database  
11 management system.

1 11. The method of claim 10 wherein the user-defined functions further comprise a second  
2 function to decrypt the user-specified data when selected from the database management  
3 system.

1 12. The system of claim 10 wherein the first function further encrypts the user-specified  
2 data with a user-specified password.

1 13. The system of claim 12 wherein the first function further encrypts with a password hint.

1 14. The system of claim 13 wherein the user-defined functions further comprise a third  
2 function to get the password hint.

1 15. A computer readable medium containing program instructions for integrating  
2 encryption functionality into a database system, the program instructions comprising:  
(a) providing at least two functions to support data encryption in a database system; and  
(b) utilizing the at least two functions within structured query language statements.

16. The program instructions of claim 15 wherein step (a) further comprising (a1) adding  
the at least two functions as user-defined functions in the database system.

17. The program instructions of claim 16 wherein the user-defined functions further  
2 comprise a first function to encrypt the user-specified data when inserted or updated in the  
3 database system, and a second function to decrypt the user-specified data when selected  
4 from the database system.

1 18. The program instructions of claim 17 wherein the first function further encrypts the  
2 user-specified data with a user-specified password.

1 19. The program instructions of claim 18 wherein the first function further encrypts with a  
2 password hint.

1 20. The program instructions of claim 19 wherein the user-defined functions further  
2 comprise a third function to get the password hint.

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